

AMENDMENT UNDER 37 C.F.R. § 1.111  
Application Serial No. 10/608,196  
Attorney Docket No. Q76318

### **REMARKS**

Upon entry of the present Amendment, claims 1-14 are all the claims pending in the application. New claim 14 is added. No new matter is presented.

To summarize the Office Action, claims 1-3, 5-9 and 11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakayama et al. (U.S. Patent No. 4,818,236, hereinafter “Nakayama”) in view of Chung Long Shan (U.S. Patent No. 6,406,323). Further, claims 4 and 12-13 are allowed, and claim 10 is objected to for depending from a rejected base claim, but would be allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims.

### **Claim Rejections - 35 U.S.C. § 103**

Applicant traverses the rejection of claims 1-3, 5-9 and 11 as allegedly being unpatentable over Nakayama in view of Chung Long Shan. As demonstrated below, the rejection of these claims is improper because the Examiner has failed to establish *prima facie* obviousness.

Claim 1 defines a circuitry assembly, comprising, *inter alia*, a plurality of first electric wires, forming a first wire group; a plurality of second electric wires, intersecting the first electric wires, while forming a second wire group; a first insulative sheet, disposed between the first wire group and the second wire group; and a wiring member that holds both of the first electric wires and the second electric wires. As defined by claim 1, the wiring member holds the

first wire group in a first direction and the second wire group in a second direction which intersects the first direction such that the first wire group intersects the second wire group.

In the grounds of rejection, the Examiner alleges that Nakayama teaches a plurality of first electric wires (referencing 6(1) through 6(4)) forming a first wire group (referencing Figure 2); a plurality of second wires (referencing 9(1) through 9(4)) intersecting the first electric wires while forming a second wire group; and a first insulative sheet (referencing 8) disposed between the first wire group and the second wire group. Further, the Examiner alleges that Chung Long Shan teaches a wiring member (referencing 92) that holds both of the first electric wires (referencing 140, 142, 144) and the second electric wires (referencing 96, 98, 100) in the claimed intersection relationship. The Examiner alleges that it would have been obvious to provide the assembly of Nakayama with the wiring member of Chung Long Shan “in order for increase and decrease in number of electric wire can be easily coped with, and each electric wire (entering or leaving) can be surely and tightly held as well as separating controls cables, power cables or wires.” *See* Office Action at pages 3-4.

As evidenced by the following, the Examiner’s asserted motivation is not based on the objective teachings of the references and the Examiner has failed to provide a convincing line of reasoning as to why one of ordinary skill would have combined Nakayama and Chung Long Shan. For instance, Nakayama teaches a wire harness in which flat conductors of a first branch harness are electrically connected to flat conductors of a second wire harness. More specifically, a vertical branch harness  $W_1$ - $W_4$  is fixed to each harness conductor of a horizontal branch harness  $W_0$ , respectively, by soldering, rivets, or grommets, through holes 7 formed in an

insulating sheet 8, which is disposed between the vertical branch harness and the horizontal branch harness. *See* Nakayama at col. 3, lines 18-28 and Figure 2. Thus, according to Nakayama, the conductors of a first and second group that intersect are electrically connected at respective holes of the insulating sheet.

Conversely, Chung Long Shan teaches an insulation displacement contact of a connector for making electrical connection to a plurality of insulated wires. *See* Chung Long Shan at col. 1, lines 50-54. In this regard, Chung Long Shan teaches that the reactive forces of a bifurcated insulation displacement contact can be increased in the “X” component by stiffening contact portions and in the “Y” component by terminating first, second and subsequent wires in the insulation displacement contact in a criss-cross pattern. *See* Chung Long Shan at col. 4, line 50 - col. 5, line 27. As taught by Chung Long Shan, the insulation displacement contacts 10 may be included in a connector 90, which is “designed to make connection between three *insulated wires of a first cable* 102, each to a respective one of three *insulated wires of a second cable* 104.” *See* Chung Long Shan at col. 6, lines 32-37 (emphasis added).

The Examiner has failed to provide any convincing line or reasoning as to how the teaching of Chung Long Shan would be combined with Nakayama’s flat conductors and insulating sheet. For instance, one of ordinary skill in the art would not have referred to the teachings of Chung Long Shan, which teaches a connector in which intersecting wire groups are electrically connected by insulation displacement contacts, for a wire harness in which the flat conductors are electrically connected at holes formed in an insulating sheet which is disposed between the intersecting wire groups. Rather, the purpose of the insulating sheet in Nakayama is

to *prevent electrical contact between uninsulated wires* except for the portions at which the holes are provided.

By contrast, Chung Long Shan's teaching is directed to a connector in which insulated wires of intersecting groups are electrically connected by insulation displacement contacts. Moreover, Applicant notes that there is no disclosure in Chung Long Shan that the connector structure is applied to any type of electrical connection other than the insulation displacement contacts. Indeed, the wire channel structure (wire channels 120-124 in a first direction and wire channels 128-132 in a perpendicular direction) of Chung Long Shan would *prevent* an insulative sheet from being "disposed between the first wire group and the second wire group", as required by claim 1.

As demonstrated by the foregoing, the motivation to combine Nakayama and Chung Long Shan is improper because the Examiner has failed to provide a convincing line of reasoning as to why one of ordinary skill in the art would have been motivated to combine an insulation displacement contact connector, as in Chung Long Shan, with flat conductors which are electrically connected by holes in an insulative sheet, as in Nakayama. Further, Applicant notes that the Examiner has failed to identify any objective teaching based on the actual disclosure of Chung Long Shan, but has merely provided conclusory opinions that one of ordinary skill would combine these teachings.

Thus, the rejection of claim 1 is improper at least because the asserted motivation to combine these teachings is improper and the Examiner has impermissibly relied upon hindsight reconstruction to selectively lift features from unrelated and incompatible connectors. The

AMENDMENT UNDER 37 C.F.R. § 1.111  
Application Serial No. 10/608,196  
Attorney Docket No. Q76318

grounds of rejection are therefore insufficient to establish *prima facie* obviousness of the features defined by claim 1. Accordingly, reconsideration and withdrawal of the rejection of claim 1 is requested. Further, claims 2-14 are allowable at least by virtue of depending from claim 1.

### **New Claim**

In order to provide additional coverage merited by the scope of the invention, Applicant is adding new claim 14. As noted above, claim 14 is allowable at least by virtue of its dependency.

Further, Applicant submits that the combination of Nakayama and Chung Long Shan fails to teach or suggest the feature of the wiring member holds the first electric wires and the second electric wires at a peripheral end portion of the wiring member at which the first wire group does not intersect the second wire group, as recited by claim 14. For instance, in the grounds of rejection, the Examiner contends that part 92 of Chung Long Shan corresponds to the claimed wiring member. However, as taught by Chung Long Shan, the wires are held at the wire channels 122, 124, 126 that intersect the other wire channels 128, 130, 132. *See* Chung Long Shan at col. 6, lines 48-54.

### **Conclusion**

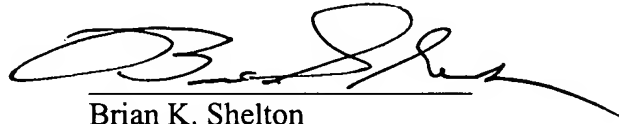
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

AMENDMENT UNDER 37 C.F.R. § 1.111  
Application Serial No. 10/608,196  
Attorney Docket No. Q76318

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Brian K. Shelton  
Registration No. 50,245

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: February 9, 2006